

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant:	Ni YICHENG et al.	Confirmation No.:	2018
Serial No.:	10/595,062	Art Unit:	1618
Filed:	January 25, 2006	Examiner:	Not Yet Assigned
		Customer No.:	21559
Title:	NECROSIS AVID TRACER AGENT		

Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

PETITION TO CORRECT FILING RECEIPT

Applicant requests that the enclosed filing receipt be corrected as follows.

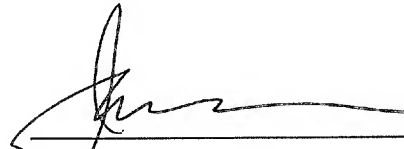
In the Foreign Applications section, please change the serial number of the United Kingdom Application from "0317467" to read --0317467.9--.

Enclosed are copies of the incorrect filing receipt and copies of the Preliminary Amendment and Declaration as filed with the application showing the correct serial number of the priority document.

If there are any charges or any credits, please apply them to Deposit Account No.  
03-2095.

Respectfully submitted,

Date: 28 March 2007

  
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**DE-DOCKETED**  
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UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
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MAR 26 2007

APPL NO.	FILING OR 371(c) DATE	ART UNIT	FIL FEE REC'D	ATTY. DOCKET NO	TOT CLMS	IND CLMS
10/595,062	01/25/2006	1618	450	50304/111001	20	2

**CONFIRMATION NO. 2018**

21559  
CLARK & ELBING LLP  
101 FEDERAL STREET  
BOSTON, MA 02110

**FILING RECEIPT**



\*OC000000022555821\*

Date Mailed: 03/21/2007

Receipt is acknowledged of this regular Patent Application. It will be considered in its order and you will be notified as to the results of the examination. Be sure to provide the U.S. APPLICATION NUMBER, FILING DATE, NAME OF APPLICANT, and TITLE OF INVENTION when inquiring about this application. Fees transmitted by check or draft are subject to collection. Please verify the accuracy of the data presented on this receipt. **If an error is noted on this Filing Receipt, please mail to the Commissioner for Patents P.O. Box 1450 Alexandria Va 22313-1450. Please provide a copy of this Filing Receipt with the changes noted thereon. If you received a "Notice to File Missing Parts" for this application, please submit any corrections to this Filing Receipt with your reply to the Notice. When the USPTO processes the reply to the Notice, the USPTO will generate another Filing Receipt incorporating the requested corrections (if appropriate).**

**Applicant(s)**

Ni Yicheng, Herent, BELGIUM;  
Guy Bormans, Rotselaar, BELGIUM;  
Guy Marchal, Blanden, BELGIUM;  
Alfons Verbruggen, Wilsle, BELGIUM;

**Power of Attorney:** The patent practitioners associated with Customer Number **21559**.

**Domestic Priority data as claimed by applicant**

This application is a 371 of PCT/BE04/00107 07/23/2004

**Foreign Applications**

0317467.9  
UNITED KINGDOM 0317467-07/25/2003

**If Required, Foreign Filing License Granted:** 02/19/2007

The country code and number of your priority application, to be used for filing abroad under the Paris Convention, is **US10/595,062**

**Projected Publication Date:** 05/31/2007

**Non-Publication Request:** No

**Early Publication Request:** No

**\*\* SMALL ENTITY \*\***

**Title**

Necrosis avid tracer agent

**Preliminary Class**

424

## **PROTECTING YOUR INVENTION OUTSIDE THE UNITED STATES**

Since the rights granted by a U.S. patent extend only throughout the territory of the United States and have no effect in a foreign country, an inventor who wishes patent protection in another country must apply for a patent in a specific country or in regional patent offices. Applicants may wish to consider the filing of an international application under the Patent Cooperation Treaty (PCT). An international (PCT) application generally has the same effect as a regular national patent application in each PCT-member country. The PCT process **simplifies** the filing of patent applications on the same invention in member countries, but **does not result** in a grant of "an international patent" and does not eliminate the need of applicants to file additional documents and fees in countries where patent protection is desired.

Almost every country has its own patent law, and a person desiring a patent in a particular country must make an application for patent in that country in accordance with its particular laws. Since the laws of many countries differ in various respects from the patent law of the United States, applicants are advised to seek guidance from specific foreign countries to ensure that patent rights are not lost prematurely.

Applicants also are advised that in the case of inventions made in the United States, the Director of the USPTO must issue a license before applicants can apply for a patent in a foreign country. The filing of a U.S. patent application serves as a request for a foreign filing license. The application's filing receipt contains further information and guidance as to the status of applicant's license for foreign filing.

Applicants may wish to consult the USPTO booklet, "General Information Concerning Patents" (specifically, the section entitled "Treaties and Foreign Patents") for more information on timeframes and deadlines for filing foreign patent applications. The guide is available either by contacting the USPTO Contact Center at 800-786-9199, or it can be viewed on the USPTO website at <http://www.uspto.gov/web/offices/pac/doc/general/index.html>.

For information on preventing theft of your intellectual property (patents, trademarks and copyrights), you may wish to consult the U.S. Government website, <http://www.stopfakes.gov>. Part of a Department of Commerce initiative, this website includes self-help "toolkits" giving innovators guidance on how to protect intellectual property in specific countries such as China, Korea and Mexico. For questions regarding patent enforcement issues, applicants may call the U.S. Government hotline at 1-866-999-HALT (1-866-999-4158).

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### **LICENSE FOR FOREIGN FILING UNDER Title 35, United States Code, Section 184 Title 37, Code of Federal Regulations, 5.11 & 5.15**

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IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant:	YICHENG et al.	Art Unit:	Not Yet Assigned
Serial No.:	Not Yet Assigned	Examiner:	Not Yet Assigned
Filed:	January 25, 2006	Customer No.:	21559
Title:	NECROSIS AVID TRACER AGENT		

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Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

PRELIMINARY AMENDMENT

Prior to examination of the above-captioned application, kindly amend the application as follows.

### AMENDMENTS TO THE SPECIFICATION

On page 1 (line 1) of PCT/BE2004/000107 (WO 2005/009423 A1; copy enclosed),  
insert the following before "Field of Invention."

### CROSS-REFERENCE TO RELATED APPLICATIONS

This application is the U.S. National Stage of International Application No.  
PCT/BE2004/000107, filed July 23, 2004, which, in turn, claims the benefit of British  
Patent Application No. GB 0317467.9, filed July 25, 2003.

## AMENDMENTS TO THE CLAIMS

### Claims 1-14 (Cancelled)

15. (New) A method for obtaining an image of ischemic, infarcted or necrotic tissue in a subject, comprising the step of administering an imaging agent comprising a phenanthro[1,10,9,8-opqra]perylene-7,14-dione compound.
16. (New) The method according to claim 15 wherein said compound is hypericin, pseudohypericin or a derivative thereof.
17. (New) The method according to claim 15 wherein said compound is stentorin or a derivative thereof.
18. (New) The method according to claim 15 wherein said compound is a fringelite or a derivative thereof.
19. (New) The method according to claim 15 wherein said compound is a gymnochrome or a derivative thereof.
20. (New) The method according to claim 15 wherein said compound is blepharismine or a derivative thereof.
21. (New) The method according to claim 15 wherein said compound is conjugated to a radionuclide.
22. (New) The method according to claim 15 wherein said compound is



conjugated to a radionuclide selected from the group consisting of Tc-99m, I-123, I-125, I-111, In-113m and G-67.

23. (New)        The method according to claim 15 wherein said compound is hypericin conjugated to a radionuclide.
24. (New)        The method according to claim 15 wherein said compound is radio-labeled hypericin, wherein hypericin is labeled on carbon 2 atom, in ortho-position of the most acidic phenolic group.
25. (New)        The method according to claim 15 wherein said compound is conjugated to a radiopaque material.
26. (New)        The method according to claim 15 wherein said compound is conjugated to a radiopaque material selected from the group consisting of iodine compounds, barium compounds, gallium compounds, thallium compounds, barium diatrizoate, ethiodized oil, gallium citrate, iocarmic acid, iocetamic acid, iodamide, iodipamide, iodoxamic acid, iogulamide, iohexol, iopamidol, iopanoic acid, ioprocemic acid, iosefamic acid, ioseric acid, iosulamide meglumine, iosumetic acid, iotasul, iotetric acid, iothalamic acid, iotroxic acid, ioxaglic acid, ioxotrizoic acid, ipodate, meglumine, metrizamide, metrizoate, propyliodone and thallous chloride.
27. (New)        The method according to claim 15 wherein said compound is conjugated to a material that enhances the effects of magnetic resonance imaging.
28. (New)        The method according to claim 15 wherein said compound is

conjugated to a material that enhances the effects of magnetic resonance imaging, said material including gadolinium, copper, iron or chromium.

29. (New)        The method according to claim 15 wherein said compound is conjugated to a material that enhances the effects of magnetic resonance imaging, said material including gadolinium, copper, iron or chromium in the form of an organometallic chelate bound to said agent.
30. (New)        The method according to claim 15 wherein said administration is parenteral injection.
31. (New)        The method according to claim 15 wherein said administration is parenteral injection, and wherein said method further comprises the step of allowing the agent to accumulate at the site of the diseased tissue.
32. (New)        The method according to claim 15 wherein said administration is parenteral injection, wherein said method further comprises the step of allowing the agent to accumulate at the site of the diseased tissue, and wherein after sufficient time the diseased tissue is visualised by scanning the subject with a gamma camera.
33. (New)        The method according to claim 15 wherein said administration is intravenous injection.
34. (New)        A pharmaceutical composition comprising a phenanthro[1,10,9,8-opqra]perylene-7,14-dione compound optionally conjugated to a radionuclide or a

radiopaque material, provided that said phenanthro[1,10,9,8-opqra]perylene-7,14-dione compound is not mono-[<sup>123</sup>I]-iodohypericin.

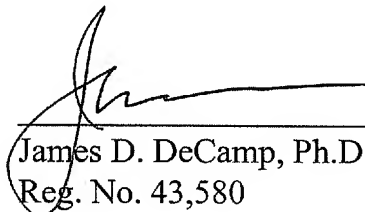
## REMARKS

Applicants herewith file, without prejudice, a new set of claims to substitute the claims as filed in the International Application, PCT/BE2004/000107 (copy enclosed). Applicants note that there is no intention to abandon any subject matter with regard to any deleted matter. Applicants also amend the specification to cross-reference related applications. A courtesy copy of the present specification is enclosed, but the World Intellectual Property Office (WIPO) copy should be relied upon if it is already present in the U.S. Patent and Trademark Office file. No new matter has been added by the present amendment.

If there are any charges or any credits, please apply them to Deposit Account No. 03-2095.

Respectfully submitted,

Date: 1/25/2006

  
\_\_\_\_\_  
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**Box No. VIII (iv) DECLARATION: INVENTORSHIP** (only for the purposes of the designation of the United States of America)  
*The declaration must conform to the following standardized wording provided for in Section 214; see Notes to Boxes Nos. VIII, VIII (i) to (v) (in general) and the specific Notes to Box No. VIII (iv). If this Box is not used, this sheet should not be included in the request.*

**Declaration of inventorship (Rules 4.17(iv) and 51bis.1(a)(iv))  
 for the purposes of the designation of the United States of America:**

I hereby declare that I believe I am the original, first and sole (if only one inventor is listed below) or joint (if more than one inventor is listed below) inventor of the subject matter which is claimed and for which a patent is sought.

This declaration is directed to the international application of which it forms a part (if filing declaration with application).

This declaration is directed to international application No. PCT/BE 2004/1000107... (if furnishing declaration pursuant to Rule 26ter).

I hereby declare that my residence, mailing address, and citizenship are as stated next to my name.

I hereby state that I have reviewed and understand the contents of the above-identified international application, including the claims of said application. I have identified in the request of said application, in compliance with PCT Rule 4.10, any claim to foreign priority, and I have identified below, under the heading "Prior Applications," by application number, country or Member of the World Trade Organization, day, month and year of filing, any application for a patent or inventor's certificate filed in a country other than the United States of America, including any PCT international application designating at least one country other than the United States of America, having a filing date before that of the application on which foreign priority is claimed.

Prior Applications: 25 July 2003 - 0317467.9 - GB \*\*

I hereby acknowledge the duty to disclose information that is known by me to be material to patentability as defined by 37 C.F.R. § 1.56, including for continuation-in-part applications, material information which became available between the filing date of the prior application and the PCT international filing date of the continuation-in-part application.

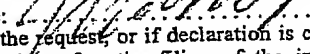
I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.

Name: NI, Yicheng  
 Roeselveld 29

Residence: 3020 Herent  
 (city and either US state, if applicable, or country) Belgium

Mailing Address:

Citizenship: BE

Inventor's Signature:   
 (if not contained in the request, or if declaration is corrected or added under Rule 26ter after the filing of the international application. The signature must be that of the inventor, not that of the agent)

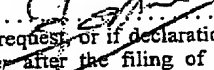
Date: 13/09/2004  
 (of signature which is not contained in the request, or of the declaration that is corrected or added under Rule 26ter after the filing of the international application)

Name: BORMANS, Guy  
 Aarschotsesteenweg 46

Residence: 3110 Rotselaar  
 (city and either US state, if applicable, or country) Belgium

Mailing Address:

Citizenship: BE

Inventor's Signature:   
 (if not contained in the request, or if declaration is corrected or added under Rule 26ter after the filing of the international application. The signature must be that of the inventor, not that of the agent)

Date: 13 sept 2004  
 (of signature which is not contained in the request, or of the declaration that is corrected or added under Rule 26ter after the filing of the international application)

☒ This declaration is continued on the following sheet, "Continuation of Box No. VIII (iv)".

**Continuation of Box No. VIII (i) to (v) DÉCLARATION**

*If the space is insufficient in any of Boxes Nos. VIII (i) to (v) to furnish all the information, including in the case where more than two inventors are to be named in Box No. VIII (iv), in such case, write "Continuation of Box No. VIII ..." (indicate the item number of the Box) and furnish the information in the same manner as required for the purposes of the Box in which the space was insufficient. If additional space is needed in respect of two or more declarations, a separate continuation box must be used for each such declaration. If this Box is not used, this sheet should not be included in the request.*

NAME INVENTOR

DATE

SIGNATURE

MARCHAL, Guy  
Hertogenveld 5  
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13 September 2004



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